

EFFECTIVENESS OF UTILIZING STICKER ON READING RESISTOR COLOR CODE AT SMP NEGERI 15 YOGYAKARTA

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ABSTRACT

Research objective is to determine the difference between the learning outcomes of students who utilize stickers and who doesn't utilize stickers with magnetic board to help read resistor color code, and also determine the effectiveness of utilizing the stickers with magnetic board on the reading resistor color code at SMP Negeri 15 Yogyakarta .

A method of this research is true experiments with a design or research design "Post test Control Group Design", where a group of subject taken from certain populations grouped into two groups, which is the experimental and the control group. 272 total population of class ix and samples taken as many as 68 students of class IX at smpn 15 jogjakarta. Research Data taken by doing post-test in the experimental and the control group. Determining the validity and reliability of research instruments in the form of post-test, item questionnaires of research instrument tested by validity and reliability test. Before the data analysis done to test the hypothesis with T-test test, performed the requirements analysis of data research by normality and homogeneity tests.

The average value of student learning outcomes in the first post-test control group amounted to 57.5 and 78.68 for the experimental group. On the second post-test control group is 61,47 and experimental group is 80,74. On third post-test, control group is 63,97 and experimental group is 90. There is a difference in the value of the learning outcomes of the first post-test 21.18, second post-test at 19.27 and third post-test at 26.03 which indicates that students who utilize stickers on reading resistor color code has a better grade than whom doesn't utilize stickers; T-test analysis results on the first post-test shows the level of significance $0.000 < 0.05$, second post-test is $0.001 < 0.05$ and third post-test is $0.000 < 0, 05$. so the alternative hypothesis which states that effectiveness of utilizing stickers on the grade of student learning outcomes in reading resistor color codes than whom doesn't using stickers is acceptable and because the average value of the experimental group students learning outcomes in first post-test is 78.68, second post-test was 80.74 and third post-test is 90 above the value of KKM 75. This means that the utilizing stickers on reading resistor color codes can be effective.

Keyword: sticker, magnetic board, resistor color code, true experiment